

In the claims:

Please amend the claims as follows:

1. (Currently Amended.) A method for blocking the permeability of an elevated-temperature zone in a reservoir of a subterranean formation penetrated by a wellbore, the method comprising the steps of:
 - a. ~~selecting the zone to be treated, wherein the upper limit of the temperature range of the zone is equal to or greater than 190°F (88°C);~~
 - b. forming a well treatment fluid comprising:
 - i. water;
 - ii. a water-soluble polymer comprising polymerized vinyl amine units, wherein the water-soluble polymer further comprises polymerized vinyl alcohol units;
 - iii. an organic compound capable of crosslinking with the vinyl amine units of the water-soluble polymer;
 - c. ~~selecting the water-soluble polymer and the organic compound of the well treatment fluid such that the gel time of the well treatment fluid is at least 2 hours when measured at the upper limit of the temperature range of the zone; and~~
 - d. injecting the well treatment fluid through the wellbore and into the zone.
2. (Currently Amended.) The method according to Claim 1 43, wherein the upper limit of the temperature range of the zone is equal to or greater than 250°F (121°C).
3. (Currently Amended.) The method according to Claim 1 43 or 2, wherein the upper limit of the temperature range of the zone is equal to or less than 350°F (177°C).
4. (Original.) The method according to Claim 3, wherein the lower limit of the temperature range of the zone is equal to or greater than 190°F (88°C).

5. (Currently Amended.) The method according to Claim ~~4~~ 43, wherein the lower limit of the temperature range of the zone is equal to or greater than 190°F (88°C)
6. (Original.) The method according to Claim 1, wherein the water is selected from the group consisting of fresh water, seawater, natural brine, formulated brine, 2% KCl solution, and any combination in any proportion of the foregoing.
7. (Currently Amended.) The method according to Claim ~~4~~ 23, wherein the water-soluble polymer further comprises polymerized vinyl alcohol units.
8. (Currently Amended.) The method according to Claim ~~6~~ 1 or 7, wherein the water-soluble polymer comprises a copolymer of vinyl amine units and vinyl alcohol units.
9. (Original.) The method according to Claim 1 or 7, wherein the water-soluble polymer comprises up to 50 mole % polymerized vinyl amine units.
10. (Currently Amended.) The method according to Claim ~~4~~ 43 or ~~7~~ 44, wherein the mole % of the polymerized vinyl amine units of the water-soluble polymer is selected to at least partially control the gel time of the well treatment fluid when measured at the upper limit of the temperature range of the zone.
11. (Original.) The method according to Claim 1, wherein the organic compound comprises an acrylamide-based polymer.
12. (Currently Amended.) The method according to ~~any one of~~ Claim 11, wherein the ratio of the water-soluble polymer to the acrylamide-based polymer is from about 50:1 to about 1:1.
13. (Original.) The method according to Claim 1, wherein the organic compound is selected from the group consisting of polyacrylamide; acrylamide/t-butyl acrylate copolymer; alkyl acrylate polymer; 2-acrylamido-2-methylpropane sulfonic acid/acrylamide copolymers;

sulfonated styrene/maleic anhydride copolymers; vinylpyrrolidone/2-acrylamido-2-methylpropane sulfonic acid/acrylamide terpolymers; 2-acrylamido-2-methylpropane sulfonic acid/N-N-dimethylacrylamide/acrylamide terpolymers; sulfonated styrene/maleic anhydride copolymer; a vinyl pyrrolidone/2-acrylamido-2-methylpropane sulfonic acid/acrylamide terpolymer; an 2-acrylamido-2-methylpropane sulfonic acid/N-N-dimethylacrylamide/acrylamide terpolymer; and any combination in any proportion of the foregoing.

14. (Currently Amended.) The method according to Claim ~~12~~ 13, wherein the alkyl acrylate polymer comprises a polymer containing at least one unit selected from the group consisting of dimethylaminoethyl methacrylate, dimethylaminopropyl methacrylamide, quaternized dimethylaminoethyl methacrylate, and any combination in any proportion of the foregoing.

15. (Original.) The method according to Claim 1, wherein the organic compound is selected from the group consisting of any one or more polymers comprising: polymerized units having a cross-linking functionality capable of crosslinking with the vinyl amine units of the water-soluble polymer.

16. (Original.) The method according to Claim 1 or 15, wherein the organic compound is selected to have the cross-linking functionality sterically hindered.

17. (Original.) The method according to Claim 16, wherein the organic compound is further selected from the group consisting of any one or more polymers comprising: polymerized units of t-butyl acrylate and 2-acrylamido-2-methylpropanesulfonic acid, and any combination in any proportion of the foregoing.

18. (Original.) The method according to Claim 1, wherein the organic compound is further selected from the group consisting of any one or more polymers comprising: polymerized units of t-butyl acrylate and 2-acrylamido-2-methylpropanesulfonic acid, and any combination in any proportion of the foregoing.

19. (Original.) The method according to Claim 1, wherein the organic compound is further selected from the group consisting of: sulfonated styrene/maleic anhydride copolymer, a vinyl pyrrolidone/2-acrylamido-2-methylpropanesulfonic acid copolymer/acrylamide terpolymer, an 2-acrylamido-2-methylpropanesulfonic acid copolymer/N-N-dimethylacrylamide/acrylamide terpolymer, and any combination in any proportion of the foregoing.

20. (Currently Amended.) The method according to Claim 1 43 or 44, wherein the gel time of the well treatment fluid is less than 100 hours when measured at the upper limit of the temperature range of the zone.

21. (Currently Amended.) The method according to Claim 1 43 or 44, wherein the gel time is less than 30 hours when measured at the upper limit of the temperature range of the zone.

22. (Currently Amended.) The method according to Claim 1 43 or 44, further comprising the step of: delaying any substantial flowback from the zone for at least the gel time of the well treatment fluid after the step of injecting the well treatment fluid into the zone.

23. (Currently Amended.) A method for blocking the permeability of an elevated-temperature zone in a reservoir of a subterranean formation penetrated by a wellbore, the method comprising the steps of ~~The method according to Claim 1, further comprising the step of:~~

a. forming a well treatment fluid comprising:

- i. water;
- ii. a water-soluble polymer comprising polymerized vinyl amine units;
- iii. an organic compound capable of crosslinking with the vinyl amine units of the water-soluble polymer; and

- b. injecting the well treatment fluid through the wellbore and into the zone; and
- c. injecting a breaker into the zone, the breaker adapted to break a gel formed by the well treatment fluid.

24 – 41. Canceled.

42. (Presently Amended.) The method according to ~~Claim 1~~ any one of Claims 43 or 44, wherein the gel time is less than 30 hours when measured at 190°F (88°C).

43. (New.) A method for blocking the permeability of an elevated-temperature zone in a reservoir of a subterranean formation penetrated by a wellbore, the method comprising the steps of:

- a. selecting the zone to be treated, wherein the upper limit of the temperature range of the zone is equal to or greater than 190°F (88°C);
- b. forming a well treatment fluid comprising:
 - i. water;
 - ii. a water-soluble polymer comprising polymerized vinyl amine units, wherein the water-soluble polymer further comprises polymerized vinyl alcohol units;
 - iii. an organic compound capable of crosslinking with the vinyl amine units of the water-soluble polymer;
- c. selecting the water-soluble polymer and the organic compound of the well treatment fluid such that the gel time of the well treatment fluid is at least 2 hours when measured at the upper limit of the temperature range of the zone; and
- d. injecting the well treatment fluid through the wellbore and into the zone.

44. (New.) A method for blocking the permeability of an elevated-temperature zone in a reservoir of a subterranean formation penetrated by a wellbore, the method comprising the steps of:

- a. selecting the zone to be treated, wherein the upper limit of the temperature range of

the zone is equal to or greater than 190°F (88°C);

b. forming a well treatment fluid comprising:

- i. water;
- ii. a water-soluble polymer comprising polymerized vinyl amine units;
- iii. an organic compound capable of crosslinking with the vinyl amine units of the water-soluble polymer;

c. selecting the water-soluble polymer and the organic compound of the well treatment fluid such that the gel time of the well treatment fluid is at least 2 hours when measured at the upper limit of the temperature range of the zone;

d. injecting the well treatment fluid through the wellbore and into the zone; and

e. injecting a breaker into the zone, the breaker adapted to break a gel formed by the well treatment fluid.

45. (New.) The method according to Claim 44, wherein the water-soluble polymer further comprises polymerized vinyl alcohol units.